

Neither Gomes or Weigers shows a mesa formed on a substrate, the mesa defining an acoustic wave cavity as specified in claims, 1, 10 and 19. As stated in the Office Action, Gomes does not disclose the claimed mesa. Weigers does not disclose a mesa formed on a substrate, the mesa defining an acoustic wave cavity. The back plate 32 of Weigers is not a mesa defining an acoustic wave cavity as required by the claims. In Weigers, acoustic waves propagate throughout the entire substrate. Weigers specifically teaches that the acoustic wave propagating in the substrate should not be coupled to the back plate 32. Weigers accomplishes this by using either a non-shear wave coupling adhesive between the substrate and back plate 32 or by using a back plate 32 that supports greater acoustic velocities than the substrate so that there is no acoustic wave coupling into the back plate 32. As such, rather than defining an acoustic wave cavity as specified in the claims, Weigers teaches the opposite i.e., a back plate 32 which has no effect on the acoustic properties of the substrate 20 in which acoustic waves propagate.

Further, neither Gomes or Weigers shows "a feedback mechanism to provide tactile and/or audible and/or visual feedback to a user that a switch has been actuated by a touch on the touch surface" as specified in claim 1. Gomes at col. 13, lns. 36-58 described a feedback circuit known as a feedback loop which provides an electrical signal back to a part of the circuit. This feedback circuit is not a feedback mechanism that provides tactile and/or audible and/or visual feedback to a user as recited in claim 1. Moreover, the switches 1313 and 1315 are controlled by a microprocessor. They are not user actuated switches. The Office Action also cites col. 8, lns. 60-67 of Gomes which describes a "tone burst". The term "tone burst" is a name for an electrical signal that is coupled to a transmitter transducer to drive the transducer to transmit an acoustic wave into the panel. This burst signal is not a feedback mechanism that provides tactile and/or audible and/or visual feedback to a user that a switch has been actuated as required by the

claims. Similarly, col. 8, lns. 1-18 also cited in the Office Action does not relate to a feedback mechanism as claimed but generally describes matching or adapting frequencies of a controller to the requirements of a touch screen. As such, this passage does not teach the claimed feedback mechanism for providing tactile and/or audible and/or visual feedback to a user that a switch has been actuated by a touch on the touch surface as claimed.

Claim 10 further specifies “a feedback member overlying the touch surface and spaced therefrom in an unactuated position and movable to the touch surface by a force acting thereon to actuate the switch by producing a detectable change in the acoustic wave.” This claim element is no where taught or suggested in either Gomes or Weigers. Similarly, claim 19 specifies “a feedback member mounted on a back side of the substrate, the feedback member being electrically actuated in response to a detectable change in the acoustic wave indicating a touch to provide a tactile response felt by the user through the substrate and/or an audible response.” Neither Gomes nor Weigers teaches any such feedback member for providing a tactile and/or audible response for the user.

Because the combination of Gomes and Weigers does not teach a number of elements recited in the independent claims, these references do not provide a prima facie case of obviousness. As such, each of claims 1, 10 and 19 are believed allowable under 35 U.S.C. §103(a).

The rejection of claims 2-5 and 9-14 as obvious under 35 U.S.C. §103 in view of Gomes, Weigers and Huang 5,451,723 is respectfully traversed. Each of these claims is believed to be allowable for the reasons discussed above. Further, Huang does not overcome the deficiencies of either Gomes or Weigers in that it does not disclose the claimed mesa nor does it disclose the claimed feedback mechanism or member. With regard to the latter, Huang does not disclose any

deformable dome as asserted in the Office Action. The load spreading plate 18 is described at col. 4, ln. 37 of Huang as being formed of a material that is "sufficiently rigid" such as "glass" and "hard plastics" so as to perform its function of load spreading. It is, therefore, not a deformable dome as recited in claims 3 and 11. Nor is there any mention in Huang of providing feedback to the user, as required by the claims, with either the load spreading plate 18 or the layer 20. That is because these elements do not provide feedback to a user as required by the claims. Therefore, claims 2-5, 9-14 are believed to be allowable under 35 U.S.C. §103(a).

Claims 1-20 are believed to be allowable for the reasons discussed above. Reconsideration and allowance are respectfully requested.

Respectfully submitted,

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